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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/465,994	12/16/1999	TAO YE	SUN1P507	9656

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EXAMINER	
PHAM, THOMAS K	

ART UNIT	PAPER NUMBER
2121	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/465,994	Applicant(s) YE ET AL.	
	Examiner Thomas K Pham	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 December 1999* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19,21,22 and 26-29* is/are rejected.

7)☒ Claim(s) *20 and 23-25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 December 1999* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4,6 & 7* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Notice to Applicant(s)

1. Claims 1-29 of U.S. Application 09/465994 filed on 12/16/1999 are presented for examination.

DETAILED ACTION

Claim Objections

2. Claims 3 and 5 are objected to because of the following informalities: typing error on the word "transistion" (page 32 lines 23 and 30). Appropriate correction is required.

Drawings

3. New corrected drawings are required in this application because the informal drawings are not of sufficient quality. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Judge et al. U.S. Patent No. 6,430,564 (hereinafter Judge).

6. As for claim 1, Judge shows a state machine for an application manager that manages execution of an application in a digital television receiver environment, said state machine comprising: a loaded state in which the application has been loaded (col. 3 lines 1-7); a paused state in which the application is paused, the application being initialized to transition from said loaded state to said paused state (col. 3 line 57); an active state in which the application is executing, the application being started to transition from said paused state to said active state (col. 3 lines 27-30); and a destroyed state in which the application is destroyed, the application being terminated to transition from either said active state or said paused state to said destroyed state (col. 5 lines 34-35).

7. As for claim 2, Judge shows a state machine as recited in claim 1, wherein the application can transition from said loaded state to said destroyed state when the application is to be terminated while in said loaded state (col. 5 lines 40-45).

8. As for claim 3, Judge shows a state machine as recited in claim 2, wherein either of the application manager or the application can initiate the transition to said destroyed state (col. 6 lines 48-53).

9. As for claim 4, Judge shows a state machine as recited in claim 1, wherein the application can transition from said active state to said paused state when the application is to be paused (col. 3 line 56-57).

10. As for claim 5, Judge shows a state machine as recited in claim 4, wherein either of the application manager or the application can initiate the transition from said active state to said paused state (col. 6 lines 48-53).

11. As for claim 6, Judge shows a state machine as recited in claim 1, wherein only the application manager initiates the transition from said paused state to said active state by starting the application (col. 3 lines 56-57).

12. As for claim 7, Judge shows a state machine as recited in claim 1, wherein the states of said state machine together form an application lifecycle (col. 5 lines 62-65).

13. Claims 8-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Judge et al. U.S. Patent No. 6,430,564 (hereinafter Judge).

14. As for claim 8, Judge shows a computer program product for managing execution of an application according to an application lifecycle, the computer program product comprising: a computer-readable medium storing computer-readable instructions thereon, the computer-readable instructions including: instructions for loading the application such that the application enters a loaded state (col. 3 lines 1-7); instructions for initializing the application

when the application is in the loaded state such that the application enters a paused state (col. 3 line 57); instructions for starting execution of the application when the application is in the paused state such that the application enters an active state (col. 3 lines 27-30); and instructions for terminating the execution of the application when the application is in the loaded state, the paused state, or the active state such that the application enters a destroyed state (col. 5 lines 34-35).

15. As for claim 9, Judge shows the computer program product as recited in claim 8, further comprising: instructions for pausing the application when the application is in the active state such that the application enters the paused state (col. 5 lines 40-45).

16. As for claim 10, Judge shows the computer program product as recited in claim 8, wherein the instructions for starting execution of the application when the application is in the paused state cannot be called by the application (col. 3 lines 56-65).

17. As for claim 11, Judge shows the computer program product as recited in claim 8, wherein the instructions for starting execution of the application when the application is in the paused state can only be called by a process that is external to the application (col. 3 lines 56-65).

18. As for claim 12, Judge shows the computer program product as recited in claim 9, wherein the instructions for pausing the execution of the application when the application is in the active state can be called by the application or a process external to the application (col. 6 lines 43-46).

19. As for claim 13, Judge shows the computer program product as recited in claim 8, wherein the instructions for terminating the application can be executed by the application or a process external to the application (col. 6 lines 49-55).

20. Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Judge et al. U.S. Patent No. 6,430,564 (hereinafter Judge). Judge shows a computer program product for managing execution of an application according to an application lifecycle, the computer program product comprising: a computer-readable medium storing computer-readable instructions thereon, the computer-readable instructions including: instructions for initializing an application such that the application enters a paused state (col. 5 lines 12-15 and Appendix A/B); instructions for starting execution of the application such that the application enters an active state (col. 3 lines 27-30 and Appendix A/B); instructions for pausing the execution of the application such that the application enters the paused state (col. 3 lines 56-57 and Appendix A/B); and instructions for terminating the application such that the application enters a destroyed state (col. 5 lines 34-35 and Appendix A/B).

21. Claims 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Judge et al. U.S. Patent No. 6,430,564 (hereinafter Judge).

22. As for claim 15, Judge shows a computer program product for managing execution of an application according to an application lifecycle, the computer program product comprising: a computer-readable medium storing computer-readable instructions thereon, the computer-readable instructions including: instructions for starting execution of the application such that the application enters an active state (col. 3 lines 27-30 and Appendix A/B); instructions for pausing the execution of the application such that the application enters the paused state (col. 3 lines 56-57 and Appendix A/B); instructions for conditionally terminating the

execution of the application such that the application enters a destroyed state when a predetermined condition is satisfied (col. 5 lines 34-45 and Appendix A/B); and instructions for unconditionally terminating the execution of the application such that the application enters the destroyed state when the predetermined condition is not satisfied (col. 6 lines 40-55 and Appendix A/B).

23. As for claim 16, Judge shows the computer program product as recited in claim 15, wherein the predetermined condition is a signal received from the application (col. 5 lines 37-39).

24. As for claim 17, Judge shows the computer program product as recited in claim 15, wherein the predetermined condition is an absence of a signal received from the application within a specified period of time (col. 8 lines 9-15).

25. As for claim 18, Judge shows the computer program product as recited in claim 15, further comprising: instructions for ignoring a state change exception raised by the application when the predetermined condition is not satisfied, the state change exception indicating that the application does not want to terminate (col. 7 lines 33-44).

26. Claim 19 is rejected under 35 U.S.C. 102(e) as being anticipated by Judge et al. U.S. Patent No. 6,430,564 (hereinafter Judge). Judge shows a computer program product for managing execution of an application according to an application lifecycle, the computer program product comprising: a computer-readable medium storing computer-readable instructions thereon, the computer-readable instructions including: instructions for starting execution of the application such that the application enters an active state (col. 3 lines 27-30 and

Appendix A/B); instructions for pausing the execution of the application such that the application enters the paused state (col. 3 lines 56-57 and Appendix A/B); instructions for terminating the application such that the application enters a destroyed state (col. 5 lines 34-45 and Appendix A/B); and an interface including a set of instructions that enable a process other than the application to initiate execution of the instructions for starting execution of the application, the instructions for pausing the execution of the application, and the instructions for terminating the application (col. 3 lines 56-65).

27. Claims 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Judge et al. U.S. Patent No. 6,430,564 (hereinafter Judge).

28. As for claim 21, Judge shows a computer program product for managing execution of an application according to an application lifecycle, the computer program product comprising: a computer-readable medium storing computer-readable instructions thereon, the computer-readable instructions including: instructions for communicating that the application has decided to terminate and has entered a destroyed state from a loaded state, a paused state, or an active state (col. 7 lines 33-50); and instructions for communicating that the application has decided to pause its execution and has entered the paused state from the active state (col. 8 lines 9-15).

29. As for claim 22, Judge shows the computer program product as recited in claim 21, further comprising: instructions for communicating that the application wishes to resume execution and enter the active state from the paused state (col. 4 lines 11-19).

30. Claims 26-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Judge et al. U.S. Patent No. 6,430,564 (hereinafter Judge).

31. As for claim 26, Judge shows a computer program product for managing execution of an application according to an application lifecycle, the computer program product comprising: a computer-readable medium storing computer-readable instructions thereon, the computer-readable instructions including: instructions for starting execution of the application such that the application enters an active state, wherein the instructions for starting execution of the application cannot be called by the application(col. 3 lines 56-65 and Appendix A/B); instructions for pausing the execution of the application such that the application enters a paused state (col. 3 lines 56-57 and Appendix A/B); and instructions for communicating that the application wishes to resume execution and enter the active state from the paused state (col. 4 lines 11-19).

32. As for claim 27, Judge shows the computer program product as recited in claim 26, further comprising: instructions for communicating that the application has decided to pause its execution and has entered the paused state from the active state (col. 5 lines 40-45).

33. As for claim 28, Judge shows the computer program product as recited in claim 26, further comprising: instructions for terminating the application such that the application enters a destroyed state (col. 6 lines 40-46).

34. As for claim 29, Judge shows the computer program product as recited in claim 28, further comprising: instructions for communicating that the application has decided to terminate and has entered the destroyed state (col. 7 lines 27-40).

Allowable Subject Matter

35. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

36. Claims 23-25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thomas Pham; whose telephone number is (703) 305-7587 and fax number is (703) 746-8874. The examiner can normally be reached on Monday-Friday from 7:30AM- 4:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *John Follansbee*, can be reached on *(703) 305-8498 or via e-mail addressed to [joh.follansbee@uspto.gov]*. The fax number for this Group is (703) 308-5403.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [**thomas.pham@uspto.gov**].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Thomas K. Pham
Patent Examiner

tp
March 22, 2003

JOHN FOLLANSBEE
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